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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,300	01/27/2000	Toshitaka Agano	Q55891	9715

7590 04/19/2004

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2100 Pennsylvania Avenue N W  
Washington, DC 20037

EXAMINER
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NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 04/19/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/492,300

Applicant(s)

AGANO, TOSHITAKA

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. This Office Action is responsive to Amendment filed on 02/03/2004.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Callway (U.S. Patent No. 6,184,861).

Regarding claims 1 and 7, referring to Fig. 1, Callway teaches at least two sets of maximum luminance including an image maximum luminance (i.e., first intensity) for displaying an image (i.e., video data) and an ordinary maximum luminance (i.e., second intensity) for display non-image information (i.e., simple text) said ordinary maximum luminance being lower than said image maximum luminance (col. 1, lines 26-51, from col. 2, line 7 to col. 3, line 62).

Regarding claims 2-4, Callway further teaches a luminance adjusting unit (16) which, when the non-image information is displayed in cases of display of only the image, or display of a mixture of the image and the non-image information, or display of only the non-image information, adjusts a brightness of the display in an area of the non-image information or in an entire display screen (44) in accordance with said ordinary maximum luminance (col. 1, lines 26-51, from col. 2, line 7 to col. 3, line 62).

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Regarding claim 5, Callway also teaches that an entire display screen (48) is adjusted to a brightness of display not higher than said ordinary maximum luminance in accordance with an operation using graphical user interface (col. 2, lines 29-54).

Regarding claim 6, Callway further teaches adjustment of a brightness of display (44) in relation to an ordinary maximum luminance (i.e., second intensity) and a maximum luminance (i.e., first intensity) is performed by adjustment of image data (col. 1, lines 26-51, from col. 2, line 7 to col. 3, line 62).

Regarding claims 8 and 9, Callway further teaches the display device (44) wherein the image is displayed at a maximum luminance level for the display represented by m bits and wherein the non-image information is displayed at a maximum level represented by n bits wherein ( $m > n$ ) (col. 4, lines 3-26).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callway (U.S. Patent No. 6,184,861).

Regarding claim 19, Callway differs from claim 19 in that he does not specifically teach the image maximum luminance is substantially in the range of 400 cd/m<sup>2</sup> - 10,000 cd/m<sup>2</sup> and the ordinary maximum luminance is substantially in the range of 40 cd/m<sup>2</sup> - 400 cd/m<sup>2</sup>. However, Callway teaches the scaling of the intensity of the video data may be done in any ratio to the

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scaling of the intensity of graphics data to produce the desired affects (col. 5, lines 27-31) and the ranges of image maximum luminance and ordinary maximum luminance are matter of design choice. Therefore, it would have been obvious to obtain the image maximum luminance is substantially in the range of 400 cd/m<sup>2</sup> - 10,000 cd/m<sup>2</sup> and the ordinary maximum luminance is substantially in the range of 40 cd/m<sup>2</sup> – 400 cd/m<sup>2</sup> in order to provide enough luminance to view the image accurately.

6. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callway (U.S. Patent No. 6,184,861) in view of Saito et al. (U.S. Patent No. 5,315,695).

Regarding claim 10, Callway teaches adjustment of brightness of display in relation to said ordinary maximum luminance and said image maximum luminance (col. 1, lines 26-51, from col. 2, line 7 to col. 3, line 62).

Callway differs from claim 10 in that he does not specifically teach adjustment of brightness of display is performed by adjustment of light source for display. However, referring to Fig. 2, Saito teaches adjustment of brightness of display is performed by adjustment of light source for display (col. 5, lines 1-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the adjustment of brightness of display is performed by adjustment of light source for display as taught by Saito in the system of Callway in order to provide a device which permits a display luminance to be easily adjust to the desired level according to an user's instructor.

Regarding claim 11, the combination of Callway and Saito teaches adjustment of the light source (18, 20) comprises increasing or decreasing current through the light source (col. 4, lines 32-45 of Saito).

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7. Claims 12-15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callway (U.S. Patent No. 6,184,861) in view of Saito et al. (U.S. Patent No. 5,315,695) and further in view of Zhang (U.S. Patent No. 5,461,397).

Regarding claim 12, the combination of Callway and Saito differs from claim 12 in that it does not specifically teach the light source comprises multiple light sources. However, referring to Figs. 1A and 1B, Zhang teaches the light source comprises multiple light sources (32) (col. 6, lines 43-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the light source comprises multiple light sources as taught by Zhang in the system of the combination of Callway and Saito in order to control the adjustment of the light sources efficiently.

Regarding claim 13, the combination of Callway, Saito, and Zhang teaches a light source control unit which controls current through each of the multiple light sources independently to increase brightness in an entire display screen (col. 6, lines 43-59 of Zhang).

Regarding claims 14-15 and 17, the combination of Callway, Saito, and Zhang teaches display device (44) receiving a control signal (34) supplied externally to distinguish image information for display and adjusting brightness of the display based on the control signal (col. 3, lines 3-43 of Callway).

Regarding claim 18, the combination of Callway, Saito, and Zhang teaches an adjustment of brightness of display in relation to said ordinary maximum luminance and said image maximum luminance (col. 1, lines 26-51, from col. 2, line 7 to col. 3, line 62 of Callway) is performed by adjustment of plurality of light sources for display, further comprising a light source control unit which controls current through each of the plurality of the light sources

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independently to change brightness in a region of a display screen and to maintain brightness in another region of the display screen (col. 6, lines 43-59 of Zhang).

8. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**. The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

### **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, DC. 20231

**Or faxed to: 703-872-9306 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, sixth-floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

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JNguyen  
4/09/2004

  
**REGINA LIANG**  
**PRIMARY EXAMINER**